Probably we have never had a drug that has been so greatly abused and so unintelligently given, chiefly, I fear, for commercial reasons. My opinion is that its greatest usefulness is in the first six months after the infection, when in combination with mercury frequent intravenous injections of moderate amounts are given in an effort to overwhelm the invading organism before it can reach parts of the body inaccessible to any treatment. The drug is practically unobtainable now and yet I doubt if our therapy of syphilis is suffering greatly thereby. Now that we are placed in a position where mercury alone must be used, we have the opportunity to prove this: What salvarsan will do, mercury will do. What mercury will not do, salvarsan will not do. What salvarsan will not do, mercury will do.

Having persistently and intensively treated the disease for two years in a manner similar to that outlined above, the physician then may safely adopt a policy of watchful waiting for two or three years more. It is with extreme gratification that we can say that at least a majority of the cases will never show another symptom either clinical or serological. If they do, and some will, treatment more intensive, if possible, than that given before must be begun and prosecuted vigorously for at least another year. It is doubtful, however, if it is possible to ever get more than a symptomatic cure in a case that shows clinical symptoms after two years of adequate saturation with mercury and salvarsan.

In presenting to this Society this paper I assure you that I am fully aware of its shortcomings. I am aware that there comes to the syphilologist at times a case in which it seems that the luetic poison invades the whole body with such overwhelming virulence almost from its inception that our most active and persistent efforts will fail to stem its ravages to any appreciable extent. Fortunately these virulent cases constitute but a very small fractional per cent. of the total. It is also true that in spite of our most persistent efforts there will always be a liberal percentage of syphilitics who will refuse to be cured of their disease. We can reduce this number materially, however: First—By using greater frankness in telling an infected individual what the probable course of his disease will be, withholding nothing for fear of discouraging him. Second—By standardizing as much as possible our methods of treatment. Third—By abandoning the inadequate methods of treatment still more or less in vogue. Fourth—By treating everyone as a patient with a curable disease, which only needs persistence and determination on the part of patient and physician to yield happy and permanent results.

That there will be those who will develop late visceral lesions even after the above rigorous régime has been carried out I cannot safely deny. That a much greater percentage of successful results can be realized and that the stigma of incompetency quoted in the beginning of this paper can be removed by the adoption of a course similar to the above and the abandonment of the timidity and inefficiency which characterizes much of our present-day treatment, I thoroughly believe.



## SOCIETY REPORTS

### ALAMEDA COUNTY.

The regular monthly meeting of the Alameda County Medical Association was held at the Hotel Oakland, Tuesday evening, January 18, 1916. The minutes of the previous meeting were read and approved.

The following program was presented:

1. Case report, Dr. Daniel Crosby.
2. Syphilitic arthritis, Dr. Leonard Ely, San Francisco.
3. Fat embolism with report of a case, Dr. Robert T. Legge, U. of C.; pathological report by Dr. Granville Rusk, U. of C.

Dr. John Engs appeared before the Society and asked for its endorsement of the project to establish a branch of the American Red Cross in Oakland. On motion, this endorsement was given.

The Secretary read a set of resolutions passed by the Southern Medical Society of Texas asking for ample medical service in the increase to the U. S. Army proposed by the Administration. These resolutions were sent by the President of the State Medical Society, Dr. H. M. Sherman, with the request that we adopt similar ones. On motion, this was done and copies ordered sent to the Secretary of War and the California Senators and Representatives in Congress.

There being no further business the meeting adjourned.

ELMER E. BRINCKERHOFF, Secretary.

The regular monthly meeting of the Alameda County Medical Association was held at the Hotel Oakland, Tuesday evening, February 15, 1916.

The minutes of the previous meeting were read and approved.

The following program was then presented:

I. Treatment of Syphilis of the Nervous System by Intra-Spinal Injections. Dr. Jau Don Ball.

Discussion by Drs. Clifford W. Mack and H. G. Thomas.

II. Papers by the Staff of the Bureau of Communicable Diseases, California State Board of Health:

1. Pasteurization of Milk Supplies as a Protection against Typhoid Fever. Drs. J. C. Geiger and F. L. Kelly. Discussion by Drs. T. C. McCleave, R. A. Archibald, J. J. Roadhouse, H. A. Makinson and W. H. Strietmann.
2. Plasmodium Malaria, Quartan; A Type new to California. Drs. J. C. Geiger and F. L. Kelly.
3. Diphtheria Carriers. Drs. J. C. Geiger and F. L. Kelly and V. M. Bathgate, M. S. Discussion by Dr. H. A. Makinson.

Miss Shuey appeared before the society on behalf of the Berkeley Dispensary, stating that they would provide a graduate nurse for moderate fees to do hourly nursing under the directions of a doctor. Dr. J. N. Force said that this was not a charity—that the service was expected to be self-supporting.

The secretary read a set of resolutions at the request of the Los Angeles County Medical Association, "Regarding Industrial Accident Fees." There being no objection the chair appointed Dr. L. P. Adams a committee of one to investigate the matter.

The president announced that the annual banquet of the association would be held March 9, 1916.

There being no further business the meeting adjourned.

ALVIN POWELL,
Secretary pro tem.

## CALIFORNIA PEDIATRIC SOCIETY.

The next meeting of the California Pediatric Society (Northern Branch) will take place Tuesday, April 25, at 8:15, in the County Medical Assembly rooms in the Butler Building. This meeting will be a joint one with County Medical Society. The subject of discussion will be "The Defective Child." It is hoped that every one interested in this interesting question will make an especial effort to be present.

The program is as follows:

1. The Problem of the Defective Child (with lantern slides). Alexander Johnson of the Vineland Institute for Feebleminded, Vineland, New Jersey.
2. Opening Discussion. Dr. Terman, Stanford University.
3. Discussion from Standpoint Juvenile Court. Dr. Bridgman.

GEORGE D. LYMAN, Secretary-Treasurer.

## HUMBOLDT COUNTY.

I herewith send in to the State Society a list of the newly elected officers as elected at the regular meeting of the Humboldt County Medical Society on January 18, 1916.

President, Francis R. Horel; vice-president, Benj. M. Marshall; secretary, Laurence A. Wing; treasurer, Louis P. Dorais.

We held a very pleasant meeting, having a banquet and discussion of the milk problem as in Humboldt County. I hope to get all the members to stay with us and have tried to get in several new members.

LAURENCE A. WING, Secretary.

## FRESNO COUNTY.

The regular March meeting of the Fresno County Medical Society was held in the offices of Drs. Kjaerbye and Walker on the evening of March 7, President Willson presiding. Present: Drs. Aiken, Collins, Jorgensen, Ehlers, Morrison, Hayden, Mitchell, Barr, Sweeney, Long, S. M. Kjaerbye, Gillespie, Montgomery, Nicholson, Jones, Peterson, Walker, Miller, Cross, Boyd, Willson, Hare, Couey, Trowbridge, and Sweet. Minutes of previous meeting read and approved.

The application of Dr. Wallace B. Hardie of Del Rey, was reported as having been approved by the State Secretary, and Dr. Hardie was accordingly elected to membership in the Society.

The applications of Dr. Georgia Thompson of Fresno, and Dr. Henry Ehlers of Fowler were read before being forwarded to the State Secretary.

Mr. N. R. Cooper of the Fresno Convention Committee was present to offer co-operation in any possible way in making the meeting of the State Society to be held in Fresno next April a success.

It was moved, seconded, and carried that the Society approve the action of the Board of Governors at a special meeting held on February 22nd, 1916, together with the members of the Fresno City Board of Health. This action consisted in the endorsement by these two bodies of a proposal to establish a Clinic for Tuberculosis Cases under the direction of the City Board of Health with the understanding that the medical staff of the clinic should be elected by the County Medical Society.

It was decided by the Society that two members should be elected to have charge of the clinic for the year 1916. Dr. Kenneth J. Staniford and Dr. Clifford D. Sweet were nominated and then elected to take charge of the work.

It was moved, seconded, and carried that the Society give its official moral and physical support to the City Health Officer, Dr. A. H. Sweeney, for the proposed "clean-up day," April 1.

A paper on "Pyelitis in Children" was read by Dr. Clifford D. Sweet, and discussed by Drs. Hayden, Mitchell, Kjaerbye, Barr, Montgomery, Walker, and Cross.

After the usual social hour and refreshments the Society adjourned to meet in April with Drs. Willson, Mathewson and Cowan.

KENNETH J. STANIFORD, Secretary.

## MARIN COUNTY.

The regular monthly meeting of the Marin County Medical Society was held at the home of Dr. H. O. Hund, Winship Park, Ross, Calif., on February 10, 1916, at 8 p. m.

Subject: Syphilis of the Nervous System, Dr. T. G. Inman. Introduction to discussion on Surgery of the Stomach, Histology, Dr. E. V. Knapp. Discussion on Surgery of Stomach, Dr. F. W. Birtch.

All the talks were illustrated by lantern slides, by which the points under discussion were brought out very distinctly.

There were eighteen present who enjoyed the social hour which followed.

The regular monthly meeting of the Marin County Medical Society was held at the home of Dr. W. F. Jones, 508 Mission street, San Rafael, Thursday evening, March 9, 1916, at 8 p. m.

Subject: "Unusual Inflammations in the Abdominal Tract." Speaker, Dr. Phillip King Brown. Illustrated by lantern slides of X-ray plates.

Respectfully yours,

O. P. STOWE, Secretary.

## SAN JOAQUIN COUNTY.

The first regular meeting of the San Joaquin County Medical Society for the year 1916 was held at the residence of Dr. W. J. Young, Friday evening, January 28. The following members were present: Drs. W. J. Young, F. P. Clark, R. T. McGurk, B. J. Powell, H. Smythe, C. F. English, H. J. Bolinger, J. D. Dameron, R. R. Hammond,

L. Dozier, L. R. Johnson, J. V. Craviotto, R. B. Knight and D. R. Powell with Dr. McNeil of Stockton and Dr. Emmet Rixford of San Francisco as guests.

Dr. Emmet Rixford presented the paper of the evening on the mechanism of fractures, discussing in particular fractures about the elbow.

At the close of the paper, the members adjourned to partake of a delightful social repast.

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The regular monthly meeting of the San Joaquin County Medical Society was held at the offices of Drs. Barton J. and Dewey R. Powell Friday evening, February 25. Those present were: Drs. F. P. Clark, E. E. Endicott, L. Dozier, J. T. Davison, H. J. Bolinger, R. T. McGurk, C. R. Harry, C. F. English, W. J. Young, W. F. Priestly, Mary Taylor, E. A. Arthur, J. D. Dameron, Hudson Smythe, I. S. Zeimer, R. B. Knight, H. E. Sanderson, D. R. Powell, and B. J. Powell, with Dr. Philip Mills Jones, Secretary of the State Society, as guest.

Dr. Jones gave a very interesting explanation of the history of medical legislation in California, particularly during the recent period of unrest, and as he has been in intimate touch with this work for some years, he was in a position to speak not only interestingly but authoritatively. After a general discussion, in which many of the members asked questions of Dr. Jones, which were courteously answered, the meeting adjourned to the Hotel Clark where a social hour was enjoyed.

DEWEY R. POWELL, Secretary.

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## SACRAMENTO COUNTY.

The regular January meeting of the Sacramento Society for Medical Improvement was called to order by Dr. J. H. Parkinson, at the Hotel Sacramento, at 8:45 p. m. January 18, 1916.

Thirty members were present. Minutes read and approved.

Report of cases:

(1) Dr. S. E. Simmons reported a case of cholelithiasis with pancreatic cyst developing after the operation for stones.

(2) Dr. G. A. White reported a case of dumbbell-shaped gall stones, crushing of which was necessary for removal.

(3) Dr. H. D. Barnard reported a case of atresia of vagina.

(4) Dr. W. A. Beattie reported a case of Reynaud's disease.

(5) Dr. E. T. Rulison reported a case of toxemia of pregnancy treated with serum from a normally pregnant patient.

The paper of the evening, "High Caloric Diet in Children in Typhoid Fever," read by Dr. H. H. Yerington of San Francisco. Discussed by Drs. S. E. Simmons, J. J. James, E. W. Twitchell, L. G. Reynolds, E. Pitts, G. A. White, A. B. Diepenbrock, W. A. Beattie, E. T. Rulison, F. Grazer, E. C. Turner, S. J. Well, T. J. Cox, F. F. Gundrum, J. H. Parkinson. Discussion closed by Dr. Yerington .

The Secretary then read the minutes of the meeting of April, 1868, upon which date a paper upon typhoid was read.

Report of Board of Directors read.

Letter from Dr. Sherman re resolutions from Dallas, Texas, read. Moved by Dr. Hanna, seconded by Dr. Dillon and carried that these resolutions be adopted and copied and sent to the Third District of California Representative in Congress.

Vote of thanks extended to Dr. Yerington.

Adjourned at 11 p. m.

F. F. GUNDRUM, Secretary.

## STANFORD UNIVERSITY MEDICAL SCHOOL

### Cooper Clinical Society.

You are cordially invited to attend the meeting of the Cooper Clinical Society, which will be held on Monday, April 10, at 8 p. m., Room 311 of the Clinic and Laboratory Building, Stanford University Medical School, corner Sacramento and Webster streets.

**Program.**

1. Cases from Lane Hospital.
2. "Something on Colles' Fracture" (Lantern demonstration). Dr. Emmet Rixford.
3. "Notes on the Present Status of Anaesthesia." Dr. Caroline B. Palmer.

H. E. ALDERSON, President.
GEORGE D. BARNETT, Secretary.

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## LOS ANGELES COUNTY.

### Eye and Ear Section, Los Angeles.

Regular meeting of Eye and Ear Section of the Los Angeles County Medical Association, held at the offices of Drs. A. C. Rogers, T. J. and Geo. McCoy, 636 Security Bldg., Los Angeles, California, February 7, 1916.

Attendance. Drs. Brown, Dudley, Detling, Fleming, Griffith, Ide, Kyle, Leffler, T. J. McCoy, G. W. McCoy, F. W. Miller, Montgomery, Old, Rogers, F. L. Sweet, Stivers, Swetnam, Tholen, True, Kelsey.

The minutes of previous meeting read and approved. On roll-call continuing the necrology report of last meeting the following members presented cases:

Dr. Ide, first case: G. N., age 55, gardener, Oct. 21. Complaint: Cough, expectoration, loss of flesh, hoarseness (aphonia), pain in throat.

Previous history: Acknowledged gonorrhea, denied syphilis, no other illness. Present illness: Two months previously after imbibing whisky had gotten very wet in a rainstorm. For two months now voice has been hoarse. For five days has had pain in the throat (so severe as to interfere with deglutition) and increased hoarseness now amounting to aphonia. The night before his visit to the office had been unable to sleep because of the pain. No illness previous to two months ago. Examination: Epiglottis thickened, rigid, immobile, arytenoids swollen: vocal cords thickened, ulceration in interarytenoid sulcus. Smear from larynx contained many tubercle bacilli. No discoverable lung involvement. Diagnosis: Laryngeal tuberculosis apparently primary. Treatment: Tuberculin by graduate method in slowly increasing doses. Temperature running as follows: 99.6, 101.2, 100.4, 99, 98.3, 98.4, 98.8, 99. Nourishment taken through feeding tube in prone position. Local applications of formalin in glycerine and orthoform. At this stage deglutition was so painful and the epiglottis so rigid the pain was relieved by cocaine spray or orthoform, the epiglottis was amputated Nov. 11, the intention being to inject the superior laryngeal nerves also. The epiglottidectomy was followed by relief. At the sixth visit to the office following this proceeding the man returned home while it was raining. A fresh infection carried the temperature up to 103, 103.4, etc., the respirations to 32, 44. Death ensued, the picture during these last days being typical of acute lobar pneumonia. This case was reported promptly to the Health Department, and the house was visited by a district nurse, but since this man's death the nephew who accompanied him to my office, who also lived with him, has died; the man's wife is in the County Hospital with tuberculosis of the lungs and all of his three children have the disease.

Case 2. Miss A. D., age 32, consultation case. Previous history: Had an injury to her head in childhood. Present illness: Presents the phenom-

ena of Jacksonian epilepsy. Vision very indistinct; has diplopia, sees at all well only with left eye covered and temporal side of right retina turned toward object. There is right homonymous hemianopsia. Double papillitis, acute and active, the edges of both optic discs being obliterated, the veins are dilated and the arteries indistinct. There are punctate hemorrhages of retinae, both retinae. As to involvement of cranial nerves:

| | |
|---|---|
| I | Normal. |
| II | Double papillitis. |
| III | ? |
| IV | ? |
| V | Anesthenia of right cheek. |
| VI | ? |
| VII | Paresis of right face. |
| VIII | Pronounced tinnitus right. |
| IX | Normal. |
| X | " |
| XI | " |
| XII | Paresis of right side. |

There was diplopia with evident involvement of either the 3d, 4th or 6th nerves, but patient's mentality was too low at the time to investigate which. Decompression was secured by two trephine openings by Dr. W. J. G.; a few days later patient died after being in coma from time of operation. The dura was not incised, there was no idea that the lesion was an abscess. This woman had a coarse masculine appearance with considerable growth of hair on the face.

Dr. F. F. Kyle—first case: Man after six weeks with pain in the left eye and supra orbital had been treated by local measures; I saw the patient after 10 days, he had a bulging eye with pus in the middle fossa of the nose. X-ray picture showed left ethmoid a dark shadow. I suspected pus had broken through into the left orbit. The nose very narrow but I removed the left middle turbinate which was followed by a great amount of pus, pressure on the eye also forced out pus. Meningitis from orbital cellulitis developed on the opposite side, temperature ranged from 105 to 106. Lumbar puncture showed streptococci infection.

Third case: followed a tbc. mastoid. Young man of 21 in late stage of tuberculosis of the lungs developed acute mastoid, ear became infected, operation on mastoid under 2% novocain with no pain, two months later patient developed Tbc., miliary form of meningitis, which was confirmed by post mortem.

Q. Dr. Rogers of Long Beach: Did the infection of the meninges come from the ear? A. Don't think so. Dr. Fleming—discussion: I had a similar case, used cocaine in a mastoid operation. Patient died with Tbc. meningitis one year later.

Dr. Geo. McCoy: Did Dr. Fleming's case get well after the operation and die later? A. Yes.

Dr. Tholen: While in Boston I saw a septum operation under ether which took one hour; 20 minutes after the operation patient died. The nurse had left him for 20 minutes. He became cyanotic. The doctors all said no patient should be left alone.

**Report of Clinical Cases Shown This Evening.**

Dr. T. J. McCoy showed a case on which he had done Reese resection tenotomy, etc., for squint. He also reported case of eye death, or loss of an eye, in a lady operated on one month ago. She was nervous, I could not fix her eye, she would roll it up and I had to use a spoon and lost not more than two drops of vitreous; two hours afterwards patient had an attack of violent vomiting and hemorrhage of the central artery of retina—sight of eye was lost. I found out afterwards that this patient was subject to vomiting and sick headache but had not told me. Instruments shown for eye work, forceps.

Second case shown: Boy became blind in one eye from an embolus of a branch of central artery. Literature says these cases are rare. In this case all the tests were normal—Wassermann, Tbc., etc. Discussion by Dr. Frank Miller and F. L. Rogers.

Dr. Griffith's case shown: A woman, larynx case. She gave a history of having had a fibroid tumor removed 16 years ago; also one year ago had a goiter which disappeared after iodine treatment. Several weeks ago noticed a swelling of the throat following vaccine treatment for acne. Case shown for diagnosis. Discussion, Dr. Geo. McCoy—I think the right-sided lump was connected with the cartilages of the larynx.

Dr. Kyle: I have formed no definite opinion.

Dr. Fleming: It might have been a traumatism with inflammation and swelling following.

Dr. Dudley: Was the condition perichondritis or chondritis? Ans.: Yes, I think it was.

Dr. F. L. Rogers: Case resembles one I saw in Rochester, Minn.; found to be a lobe of thyroid which was removed by operation.

Dr. G. W. McCoy: Dr. Hamilton of Venice had a similar case himself. The removal of the goiter was advised but he went to another doctor who got him well without operation.

Dr. G. W. McCoy—first case: Cataract. Iris firmly bound down but the lens slipped out easily; it was syphilitic. Two other cases similar all turned out well.

Second case: A child 19 months old who had a safety pin in the bronchus two months. I did tracheotomy and removed the pin all right. Pneumonia followed but the child recovered and is now well.

Third case: Foreign body in the bronchus. Bronchoscope passed but found nothing. Ten days later excessive coughing and development of pneumonia but patient got well. I have had 60 or 70 cases of foreign body in the bronchi, either my own or associated with others. I have had two deaths. One was a peanut in the right bronchus; the other case was a jackstone. The child had had two short anesthetics given by general practitioners who tried to fish out the jackstone. While I was manipulating the jackstone lodged in Cricoid cartilage and child died suddenly.

Discussion. Dr. J. J. Kyle: I remember a case in whch a grain of corn was removed from the bronchus of a child; the mother picked up the child and it died instantly.

Dr. G. W. McCoy mentioned several points in the technique in removal of foreign bodies from the air passages.

Dr. Montgomery showed an X-ray plate made from a patient with acute frontal sinusitis. He removed anterior portion of the middle turbinate and the anterior ethmoid cells, could not reach the frontal sinus on account of a very large ethmoidal cell closing up the passageway but evidently drainage was established because the patient recovered.

Old Business: Report of the Necrology Committee on the death of Dr. Rose T. Bullard was received and, on motion, was ordered spread on the minutes of the meeting.

Applications from the following were received: Dr. Lloyd Mills, Dr. Burrowes. The chairman appointed the Executive Committee.

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**Annual Meeting of the Eye and Ear Section, Los Angeles County Medical Association,** held in the offices of Drs. Fleming, Hastings and Montgomery, Los Angeles, Cal., January 3, 1916.

Attendance: Drs. Bullard, Brown, Dudley, Fleming, Hastings, Lund, T. J. McCoy, G. W. McCoy, Montgomery, Sweet, Stevenson, True, Detling, Reynolds, Graham, Ide, Griffith, Leffler, Old, Swetnam, Tholen, Stivers.

Minutes of the previous meeting read and approved.

Dr. Old showed a case of laryngeal tumor. History over last 22 months; Wassermann negative;

Tbc. negative. Sputum now shows bacilli. Q. Is this case with laryngeal involvement primary Tbc.?

**Discussion.**

Dr. Fleming: Primary Tbc. of larynx has been reported but so rarely it can be set aside. This case is probably not primary. Q. What has been the treatment? A. Don't know, except locally usual remedies.

Dr. Hastings: I have seen cases of tuberculosis of larynx treated in all sorts of ways locally, by astringents, by antiseptics, by formalin, curettage, and it seems to me that in spite of all I ever did they never seemed to improve; but Tbc. cases do get well by leaving them alone locally and using tuberculin injection and general treatment.

Dr. Lund: Dr. Davies is with us, he has been working with Tbc. cases for years; what has he to say?

Dr. Davies: I think Tbc. larynx cases get well by rest, tuberculin, general treatment, etc.; the local treatment is of no use.

Dr. Reynolds: How about orthoform?

Dr. Hastings (answer): It calms and soothes. First clean off the larynx and apply a powder consisting of orthoform, iodoform, stearate of zinc.

Dr. Geo. McCoy said we should remember alcohol injections into the laryngeal nerves to quiet severe pain. He also reported results of treatment of foreign bodies in the eye, covering a period of the past 7 years in 10,000 cases.

Dr. Detling: Supplementary report to polyp. case of last meeting. Following its removal pus apeared in the nose. I am sure now that the polyp. removal opened the way to the pus chamber. Later I opened ethmoid and sphenoid and removed a large amount of pus.

Dr. Fleming, supplementary report to his case of sphenoid from last meeting. I found the pus to be pure staphylococcus—case is now well.

**Report of Fatal Cases.**

Dr. Dudley reported two cases: first of panophthalmitis following pneumonia and dying of meningitis. Second case, O. M. P. C.: Developing meningitis—resulting fatally.

Discussion: Dr. Sweet of Long Beach: There is yet some work to be done in the differential diagnosis between labyrinthitis and meningitis. We should formulate some sort of conclusion as to what to do in these cases. In my cases I have had bad results but it seems to me we should not have.

Dr. Montgomery reported two cases.

First case of meningitis.

Second case at County Hospital, woman admitted with a history of having been in a private hospital for 5 days, treated by hot applications; she then went to County Hospital with a request for immediate operation; meningitis developed; lumbar puncture was made, fluid showing pus germs; death in four days.

Third case, of a child with an acute cold Tuesday; Wednesday developed acute O. M. P. A. Osteopath saw child; the following Sunday it developed meningitis. Kernig's oposthotonos and irritability, no mastoid tenderness. Two days later lumbar puncture done and the fluid removed, now shows streptococci hemolyticus, child is improving, but I claim it would not be advisable to operate if we find organisms in these very cases.

Dr. Detling reported case of man with history of earache, removed wax before breakfast, after breakfast went back, no unusual symptoms; next day voice was queer, thickening of the upper posterior wall, no other symptoms. Later in the day patient was worse, semi-comatose; made memb. tymp. incision, found pus. Family physician did not agree but Dr. J. M. Brown said it was meningitis, with Kernig's sign. Paralysis of the external rectus muscle. We made a spinal puncture. Pathol. reported streptococcus mucosa infection. Patient died 2½ days later.

Discussion—Dr. Fleming: Q. Was there no other history of ear trouble? A. No.

Dr. Detling reported second fatal case. Infant with congenital catarrh, operated. Cause of death? Probably suffocation due to child having been put to bed with hands tied behind it, and in drinking milk, vomited, etc.

Dr. Hill Hastings reported case of meningitis. Dr. Bullard asked what organism was found. A. Streptococcus. Dr. Brown asked what condition were the sinuses? A. Normal.

Dr. Stephenson: I was associated on this case; it was a remarkable case, especially in regard to the choked disc and its development only when the germs were found in the spinal fluid.

Dr. Sweet: Did you suspect local meningitis? A. Yes, first local, then general.

Dr. Geo. McCoy: Just because he had a negative Widal is no sign he did not have typhoid fever. In cases with infection, the finding of germs in the spinal fluid does not necessarily mean that they will be fatal.

Dr. G. W. McCoy reported fatal case in an adjoining town. Child with bulging eye, developed meningitis from orbital cellulitis. No post-mortem allowed. Streptolytic serum used, and autogenous vaccine with relief.

Dr. Sweet of Long Beach: Case of death was the one reported last week—meningitis.

Dr. Stephenson, four cases. One case of the larynx, tubercular; one case of O. M. P. A., which developed meningitis; third case, O. M. P. C. and meningitis, from which I learned one lesson, with a posterior, superior, bulging auditory canal, I would do a mastoid operation at once.

Dr. True reported first case meningitis operated on by radical method and died. Second case, tonsillectomy. This had been operated on eight days before for T. & A. Boy had been well operated. Hemorrhage developed after crying spell at night. He had a systolic heart murmur. Counsel called in and everything known was tried. Sewing pillars together, etc. Child died.

Dr. Fleming asked was it a complete Tons. operation?

A. Yes.

Remainder of cases postponed until next meeting.

The Nominating Committee recommended the following for officers for the ensuing year:

Chairman, Dr. C. H. Montgomery; vice-chairman, G. W. McCoy; secretary, C. G. Stivers; councillor, T. J. McCoy.

Moved by Dr. Stephenson, seconded by Dr. Old, that the report be accepted.

Moved by Dr. Stephenson, seconded by Dr. Old, that secretary cast the ballot for nominees. Secretary did so, and the above officers were elected.

Dr. Montgomery took the chair, and the secretary and treasurer read his annual report.

Dr. Montgomery moved the report be accepted. Carried.

Dr. Lund moved the society extend resolutions of sympathy and condolence to Dr. Bullard for the loss of his wife, Dr. Rose Talbott Bullard. Carried.

C. G. STIVERS, M. D., Secretary.

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## PROCEEDINGS OF THE SAN FRANCISCO COUNTY MEDICAL SOCIETY.

During the month of February, 1916, the following meetings were held:

**Tuesday, February 1st. Mary's Help Hospital Clinical Evening.**

I. a. Case of Pulsating Exophthalmos.
b. X-ray Plate of Exophthalmos without Pulsation.

c. Case of Anuria in Acute Ulcerative Tonsilitis (Lues).
d. Conservative Eye Surgery in Steel Injury; Presentation of Case.
e. Acute Intestinal Obstruction on sixth day after Smooth Cataract Extraction; Fatality in 4 hours.
f. Carcinoma Choriodeae; pathological specimens. C. E. Taylor and G. T. Brady.

II. Lacerated Wound of Cornea and Lens caused by Piece of Steel Drill. Presentation of Case. M. W. Fredrick.

III. a. Recovery from Tetanus.
b. Hydronephrosis following Ureteral Stone in a Mononephritic. A. S. Keenan.

IV. An Unusual Case of Foreign Body in the Eye, followed by Malignancy. M. W. Fredrick.

V. a. Perisinus Abscess; Sinus Thrombosis.
b. Sarcoma of the Superior Maxilla masked by Vincent's Angina. J. J. Kingwell.

VI. Problems in Deformity.
a. Club Foot.
b. Spastic Hemiplegia.
c. Ankylosis of Elbow.
d. Spur on Heel.
e. Infantile Paralysis (shortening of three inches).
f. X-Ray Plates of Ankylosed Knees.
g. Kyphosis, Scoliosis and Paraplegia, treated with Bone Grafts. C. C. Crane.

VII. Primrose Poisoning. E. D. Chipman.

### General Meeting, February 8.

1. References to Anatomy in Rabelais. D. W. Montgomery. Discussed by A. L. Fisher.

2. The Application of Anoci Association to Obstetrics; Report of Cases. C. L. Hoag. Discussed by L. I. Breitstein, A. B. Spalding and F. Lynch.

3. Septic Teeth (illustrated by lantern slides). J. S. Marshall. Discussed by A. L. Fisher, W. C. Alvarez, J. G. Brady and C. F. Welty.

### Eye, Ear, Nose and Throat Section. February 23.

1. Presentation of Case of Trachoma, Treated with Carbon Dioxide Snow. A. S. Green.

2. Presentation of Two Interesting Cases of Labyrinthine Disease. H. B. Graham. Discussed by G. P. Wintermute, A. Baer, G. Brady, H. Horn, C. F. Welty and H. B. Graham.

3. Review of Thirteen Cases Operated by Smith-Indian Method; with presentation of cases. W. F. Blake. Discussed by W. S. Franklin, A. S. Green, A. Cohen, G. Brady, V. Hulen, K. Pischel, L. D. Green and H. Barkan.

### Section on Urology, February 29.

1. (a.) An Interesting Case of Pyonephrosis Necessitating Complete Ureterectomy.
(b.) X-ray plate of diverticulum of bladder.
(c.) Specimens of tuberculous kidneys.
(d.) Specimens of tuberculous testicle.
(e.) Specimen of dilated ureter. M. Krotoszyner. Discussed by R. L. Rigdon and S. Beasley.

2. Vesical Calculus; Historical. M. Silverberg.

3. Case of Complete Urinary Retention due to Urethral Calculus. G. W. Hartman. Discussed by J. von Werthern.

### Transactions of the Surgical Section of the San Francisco County Medical Society, February 15th, 1916. Chairman, Harold Brunn, M. D.

1. Adenocarcinoma of the Thyroid, with Metastasis to the Skull; presentation of case. Dr. P. Campiche.

Young man of 30 yrs. with large tumor of thyroid first noted at age of 14.

Three years ago a large tumor of left temporal region was diagnosed metastatic adenocarcinoma from the thyroid. Under use of Coley's toxin this growth disappeared. The original tumor remains.

#### Discussion.

Dr. W. Ophüls: I only wish to state that adenocarcinoma of the thyroid is very difficult to diagnose histologically. The evidence of malignancy is not very pronounced, and unless you have clear evidence of growth into the muscle or skin, it is not easy to distinguish between benign and malignant tumors of the thyroid. We have had four or five malignant tumors of the thyroid in the last five months, although as a rule they are quite rare.

Dr. W. I. Terry: I would like to ask Dr. Ophüls if there is no difference between the sarcomas and carcinomas. In their clinical course it seems to me the sarcomas grow much faster.

Dr. Ophüls: They are much more malignant, and there are combinations of both carcinoma and sarcoma in the same gland.

2. Pathological Specimens and Case Reports: Dr. W. I. Terry.
(a) Osteochondroma of Tibia.
(b) Benign and (c) Malignant Papilloma of stomach. No discussion.

3. Preliminary Blood Tests in Transfusions. Dr. S. H. Hurwitz. (Published in this number of the Journal, p. 163.)

4. Report of Transfusions done in St. Luke's Hospital during the past five years. Dr. F. W. Birtch. (Published in this number of the Journal, p. 163.)

Results of 89 Transfusions done by Drs. Terry, Weeks and Pope. Dr. Saxton Pope:

| Diagnosis | No. | Relieved | Not Improved |
|---|---|---|---|
| Acute Hemorrhage | 27 | 26 | 1 |
| Shock | 3 | — | 3 |
| Secondary Anemia | 8 | 5 | 3 |
| Septicemia | 7 | 1 | 6 |
| Pernicious Anemia | 1 | — | 1 |
| Hodgkins | 1 | — | 1 |
| Typhoid Hemorrhage | 5 | 3 | 2 |
| Sarcoma | 3 | — | 3 |
| Hemophilia | 3 | 3 | — |
| Pseudoleukemia | 2 | 2 | — |
| Purpura | 2 | 1 | 1 |
| Hemorrhage Neonatorum | 1 | — | 1 |
| Urticaria | 3 | 3 | — |
| Cholemia Hemorrhage | 2 | 2 | — |
| Gas Poisoning | 12 | 2 | 10 |

#### Discussion.

Dr. A. Newman: I have had one case of typhoid hemorrhage treated by direct transfusion. There was severe hemorrhage from the bowel in the third week of the disease. Dr. Schwarz performed the transfusion three hours after the hemorrhage. The donor had had a typhoid vaccine injection a week before, the first of a series of three. The arms were joined about 25 minutes. I had a blood pressure apparatus on the donor's arm and kept the blood going until the blood pressure began to fall. The effect on the recipient was magical. Previously white and exsanguinated, she became rose red to the tips of her ears. There was no further hemorrhage, and after a more or less stormy period she recovered. The effect upon the donor so far as typhoid was concerned was nil, but she was weak for about a

month, I suppose on account of the large amount of blood lost.

Dr. W. I. Terry: I do not know whether Dr. Pope included in these cases a number I transfused previous to other operations, but that is an indication I think for quite a number of transfusions, whether they be done by the direct or indirect methods.

Personally, I have come to place more confidence in the red blood count than in the hemoglobin estimations. It seems to me there is more possibility of error in the hemoglobin estimations than in the red blood counts, but they are interesting to compare. With 20% hemoglobin you should have practically one million in the red count.

I was much interested in Dr. Hurwitz's statement of preliminary testing of all donors. I did not realize that it could be done in a few minutes, and I shall certainly have it done in future.

In the first case of sarcoma I transfused, no hemolysis showed in the tube, but the recipient's blood was apparently hemolyzed.

Dr. H. R. Oliver: I have but little experience with transfusion—only one case in which the hemoglobin was down to 12 (ectopic pregnancy) in which transfusion was done with rapid recovery.

In cases of hemorrhage neonatorum, whole blood from the mother or father has been injected directly into the gluteal muscles; the hemorrhages immediately stopped and all recovered.

I have had two cases of gastric hemorrhage. One about two weeks ago; hemoglobin 30. The patient had been treated with horse serum, calcium, etc., without alleviation and the hemoglobin was still going down. I took 20 cc. of the wife's blood and injected it into the muscles. The day after the injection there was no more blood in the stool. We took the blood yesterday and the hemoglobin was 92. The other case (hemoglobin 17) was injected the day before yesterday and as far as we can tell the hemorrhage stopped.

The method is simple and it is well to try it in any sort of hemorrhage—severe epistaxis, phthisis, etc. I use the ordinary 20 cc. Luer syringe, boiled in sodium citrate solution, and two needles. Fill the syringe from the donor's vein, have the other needle ready, insert into the gluteal muscle and inject. There is no soreness; it is rather an extravasation through uninjured tissues.

Dr. J. L. Whitney: Some recent work by English physiologists seems to explain why transfusions have not been successful in gas poisoning. The theory of transfusion is based on the supposition, which is probably still being taught in most schools, that carbon monoxid forms a permanent combination with hemoglobin, thus excluding oxygen and causing asphyxia. As a matter of fact, the compound thus formed is not permanent and, if such blood is exposed to air in the absence of CO, the carbon monoxid hemoglobin breaks down and the blood is as good as it was before. The experiments I speak of were first done by Haldane and Lorraine Smith * and later repeated by others. In order to study various questions on circulation and respiration, they saturated their own bloods up to 40 per cent. with carbon monoxid and suffered no ill effect. They have published a curve showing the relative partition of the hemoglobin between CO and $O_2$ at various percentages of carbon monoxid in ordinary air. This shows that with .05 per cent. of CO, the blood is 42 per cent. saturated with carbon monoxid, and at .1 per cent. the blood is 60 per cent. saturated. The reaction is reversible and depends upon the well-known law of mass action, so that if there is CO in the air inhaled the stream is into the blood up to the saturation point, and, on the other hand, if the air breathed contains no CO the stream is out of the blood until the CO is entirely removed.

Therefore, if vigorous artificial respiration is used as soon as the patient is seen, preferably using oxygen in addition to the air, his blood will be entirely free of CO within a very few minutes and quite as good as any blood that could be put into him by transfusion or any other means.

It may be asked, What is the cause of death in these cases of gas poisoning? Haldane has shown that death is due to asphyxia, because the CO hemoglobin will not transport oxygen. The various tissues of the body withstand asphyxia for a different length of time. For example, the skin is very resistant and it is believed that the epithelium often survives after death for a week. The liver and kidney epithelium are also resistant. Nerve structures, however, perish after a few minutes of asphyxia, the higher centers before the more vital ones. The death of the respiratory centers occurs quite accurately eight minutes after full asphyxia, though in partial asphyxia such as must often occur in gas poisoning, it probably survives longer. If the respiratory center is dead of course the patient cannot be brought back to life. If he has been "gassed" just short of the time necessary to kill the respiratory center, the cerebral centers may have perished, and in this case he may go on breathing but his higher centers are permanently dead; that is to say, he remains in a state of coma. Such a man is technically alive but, inasmuch as the dead nerve structures are incapable of regeneration, he will never recover consciousness, and any amount of treatment of any sort will manifestly be wasted effort.

Dr. H. B. Reynolds: I would like to ask in what particular conditions of urticaria Dr. Pope gave transfusion, and whether he thinks the intramuscular would do as well as the direct transfusion.

Dr. H. C. Naffziger: I saw most of these cases of gas poisoning. Two more were transferred to the City and County and the University, one of whom recovered after transfusion, which would bring the total up to 14 with three recoveries.

The people familiar with gas cases can make a fairly correct prognosis, and it is only fair to state that these were uniformly the worst cases that came in—cases that were manifestly going to die.

Dr. Harold Brunn: I have had a considerable series of transfusions and have also used the injection of whole blood in various forms of hemorrhage.

In two cases of melena neonatorum I found it very difficult to connect up the saphenous vein, largely because of the lack of proper instruments. In both cases, after failure with transfusion, the use of whole blood from the father caused hemorrhage to cease.

I have had only one case in which I used citrated blood. This was a case of internal hemorrhage, post-peritoneal, at the Mt. Zion Hospital. Five hundred cc. of blood, diluted with 0.2 per cent. sodium citrate was used. Immediately after the injection the boy suffered a severe chill, followed by a high temperature. The following day he was better, but we did not feel justified in repeating the injection and adopted the expedient of using 20 cc. whole blood subcutaneously instead.

A case of purpura hemorrhagica with bleeding from practically all of the mucous membranes, as well as a large hemorrhage into the lesser peritoneal cavity was cured after giving whole blood injections over a considerable period of time.

A number of cases of hemorrhage from the kidney have improved remarkably with the use of whole blood injected subcutaneously.

Since nobody has made mention of the fact, a word of warning might not be out of place in re-

* Haldane and Lorraine Smith: Jour. Phys., 1896, xx, 497; 1897, xxii, 231; 1900, xxv, 331.

gard to the danger of sudden dilatation of the right heart during transfusion. Such an accident happened at the City and County Hospital in a case of carcinoma of the cecum with pronounced anemia. Preliminary to a short circuiting operation, transfusion was done by the direct method. Soon after the blood began to flow through the vessels, the patient was seized with mild convulsions, his respiration became embarrassed, his pupils dilated, and he died soon afterward in shock. I take this to be a case of death from sudden dilatation of the right heart.

Dr. Henry Horn: It is curious how little the value of this whole blood transfusion is known in connection with tonsil cases. It is curious also that I had four consecutive cases at St. Francis Hospital and each time the donor was the resident physician there—he has not only acted for me, but also in other cases. It seems to me that his blood has high agglutinating power because the results in some cases have been perfectly marvelous. The use of this method in tonsil hemorrhage is the simplest and by all odds the most practical.

Dr. B. Jablons: In connection with transfusion of infants, by utilizing the veins of the scalp it is possible to inject or withdraw blood with little difficulty.

I would like to ask Dr. Hurwitz whether it is possible to organize a bureau of donors on a practical basis, utilizing Landsteiner's classification, dividing donors into four groups.

I would also like to ask whether the hemolytic and agglutinating tests would not be affected by immersion in ice.

Dr. Hurwitz, closing discussion: In answer to Doctor Jablon's question as to whether or not hemolysis will occur at low temperatures, it is possible to state by analogy with the clinical condition, paroxysmal hemoglobinuria, that such may occur. As you well know, in the latter condition sensitization of the red corpuscles by the amboceptor takes place at low temperatures, whereas the action of the complement occurs at higher temperature. I have already referred to the presence of agglutinins in normal human bloods, and, as I stated, it is possible to divide individuals into four groups on this basis.

I was particularly interested in the discussion of the treatment of hemorrhagic diseases with whole blood, and rather surprised to learn that Doctor Birtch had not had success with the use of whole blood in hemophilia. The work of Libman and Ottenberg, to which Doctor Birtch referred, is rather insistent upon the value of transfusion in hemophilia. In fact, they recommend that every individual known to be hemophilic should have on hand a donor or donors whose blood has been found by preliminary tests to be compatible with theirs, so that in case of an attack of bleeding, one could resort to an immediate transfusion.

It is interesting to note how most physicians are paying less and less attention to the use of serum in this disease, and it is quite in keeping with what we are learning about the etiology of the various types of hemorrhagic disease. Especially in hemophilia, in which instance it has been shown with a fair degree of certainty that the defect in the blood is due to a deficiency in the circulating prothrombin, can we hope to supply the missing element in no other way than by the use of whole blood. Very recently a number of workers have also reported successful results with the use of whole blood in purpura hemorrhagica.

Dr. F. W. Birtch, closing discussion: In that case of hemorrhagic purpura the hemorrhage stopped after transfusion, but it recurred in about three weeks and had to be transfused again. I was only disappointed that it did not cure it. But it stopped the hemorrhage at the time.

Dr. Saxton Pope, closing discussion: Dr. Reynolds asked about urticaria. Dr. Morrow has used blood injections a great deal and has found them almost specific. This case verged upon angioneurotic edema and was permanently relieved by one or two injections of whole blood intravenously.

As to what form of transfusion you use, I think there is a choice. Medical men speak of the Lindeman method, which is the use of the intravenous cannula with record syringes used in succession.

The Lewishon method depends on the use of citrate of soda in two tenths per cent.—added to whole blood. The mixture does not coagulate and may be delivered intravenously by means of a hypodermiclysis outfit.

When you want a large volume of blood, you had better give a direct transfusion with the cannula method.

In typhoid possibly there is a chance for transfusion by the Kimpton-Brown tube, although this scheme is capable of damage, where positive pressure is used, through the introduction of clots into the circulation. In transfusing from dogs the usual clotting time is less than in human blood—it clots in a Kimpton tube in less than three minutes, giving one a very short time for collection and administration of the blood.

Where you wish to restore the volume of blood a direct transfusion is undoubtedly best. It is a simple thing to tell how much blood is passing over. If the cannula is connected with the radial artery and the blood run into a graduate glass, it usually runs one-half ounce in ten seconds. The vein pressure is 7 mm., the artery pressure 140, so that there is little deduction to be made for differences in pressure. In ten minutes you are running at least a pint of blood.

We transfuse our patients ten to twenty minutes, sometimes seven minutes in children. The donor usually will faint in fifteen minutes. The radial artery in the donor after such an operation, usually is restored and apparently is as good as ever after six weeks.

The surgeon will always want to use the direct method; the internist will favor the syringe. Take your choice and use discretion.

## BOOK REVIEWS

**Diseases of the Skin.** By Henry H. Hazen, A. B., M. D. Published by C. V. Mosby Company, St. Louis, 1915.

Hazen's book on Diseases of the Skin is well worth reading. The illustrations alone are enough to make the book of great value. In fact much can be learned from a study of the pictures without the print. It is not a difficult book to read as the print is large and in no place is any account long enough to be irksome, yet the subjects are all carefully covered. One could wish that even a little more might have been given on treatment, but to cover everything necessary to be considered in the treatment of skin diseases, it would require a book devoted to this subject alone. Written as the book is by a man of such excellent training and of such extensive experience both in private practice and in the clinics it is a treatise that one who is interested in skin diseases would not regret to own. G. D. C.

**Text Book of Materia Medica for Nurses.** Compiled by Lavinia L. Dock. Fifth Edition. Published by G. P. Putnam's Sons, New York and London, 1915. Price, $1.50.

A well arranged, concise and convenient book for reference and study by the class of readers for whom it is written. The brevity of the descriptions of the drugs and their actions is especially to be commended, and the introductory notes